

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 10/705,955
Attorney Docket No.: Q78397

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A vehicular generator-motor system comprising:
a rotary machine ~~including~~ comprising:
a stator having three phase armature winding and a rotor composed of a field winding for magnetizing a plurality of field magnetic poles, and
permanent magnets for magnetizing said field magnetic poles by interaction with the field winding;
an electrical power converter which performs as a rectifier when said rotary machine is operated as a generator, and performs as an inverter when said rotary machine is operated as a motor; and
a control ~~means-for-device~~ controlling said electrical power- converter, thereby, when said rotary machine is operated as a motor, said control ~~means-device~~ controls said electrical power -converter so as to restrict the armature current at the time of low speed rotation.
2. (currently amended): A vehicular generator-motor system according to claim 1, further comprising:
a field current control device ~~means-for~~ controlling a field current flowing through the field winding, wherein when said rotary machine is operated as a motor, said field current

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control ~~means-device~~ is controlled by said control ~~means-device~~ to increase said field current at the time of low speed rotation.

3. (currently amended): A vehicular generator-motor system according to claim 2, wherein said field current control ~~means-device~~ is controlled by said control ~~means-device~~ to reduce said field current with increasing rotating speed of said rotary machine.

4. (currently amended): A vehicular generator-motor system according to claim 1, wherein when said rotary machine is operated as a starting motor, said control ~~means-device~~ controls three phase terminal voltage of said inverter in response to the rotating speed of said rotary machine.

5. (currently amended): A vehicular generator-motor system according to claim 2, wherein when said rotary machine is operated as a starting motor, said control ~~means-device~~ controls three phase terminal voltage of said inverter in response to the rotating speed of said rotary machine.

6. (currently amended): A vehicular generator-motor system according to claim 3, wherein when said rotary machine is operated as a starting motor, said control ~~means-device~~ controls three phase terminal voltage of said inverter in response to the rotating speed of said rotary machine.

7. (original): A vehicular generator-motor system according to claim 1, wherein the armature current at the time of low speed rotation is limited to 300 amperes or below.

8. (original): A vehicular generator-motor system according to claim 1, wherein said electrical power converter operated as the inverter is air-cooled.

9. (original): A vehicular generator-motor system according to claim 1, wherein said electrical power converter is functioned as the inverter only when said rotary machine is operated as a motor.

10. (original): A vehicular generator-motor system according to claim 1, wherein said rotor includes a pair of claw-shaped poles in which each of pair poles has a plurality of claw-shaped pole pieces alternately meshed to each other, and each of said permanent magnets is inserted between said adjacent claw-shaped pole pieces.

11. (original): A vehicular generator-motor system according to claim 10, wherein each of said adjacent claw-shaped pole pieces is magnetically shorted by a magnetic bridge element at the periphery of said claw-shaped poles, and said permanent magnets are disposed inside of said bridge elements.